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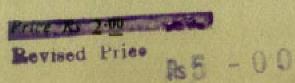
# Indian Standard SPECIFICATION FOR CLUBS, INDIAN

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INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 1



# Indian Standard

# SPECIFICATION FOR CLUBS, INDIAN

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(Continued on page 2)

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#### IS: 4980 - 1968

(Continued from page 1)

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# Indian Standard SPECIFICATION FOR CLUBS, INDIAN

#### 0. FOREWORD

- **0.1** This Indian Standard was adopted by the Indian Standards Institution on 30 December 1968, after the draft finalized by the Sports Goods Sectional Committee had been approved by the Consumer Products Division Council.
- **0.2** Clubs are used by athletes and gymnasts for physical training. These are also employed for regular body-building by other cross-section of the society. The results being dependent to a large extent on the equipment available, formulation of a standard was considered very essential.
- **0.3** This standard is one of a series of Indian Standards on sports goods, prepared on the recommendations of the Sports Goods Export Promotion Council, New Delhi. Other standards published so for in the series are given at page 6.
- **0.4** In preparing this standard, considerable assistance has been derived from the following:

DIN 7912: 1960 Indian clubs. Deutscher Normenausschuss.

- Drg No. IND/GS/MED/393(a) Clubs, Indian. CIGS, Ministry of Defence, Government of India.
- **0.5** Clause **6.1** calls for an agreement between the purchaser and the supplier or permits the purchaser to use his option for selection to suit his requirements.
- 0.6 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS:2-1960\*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

#### 1. SCOPE

1.1 This standard lays down requirements pertaining to material, dimensions and manufacture of Indian clubs used for physical training.

#### 2. MATERIAL

2.1 These shall be manufactured from reasonably straight-grained and well seasoned wood (moisture content not exceeding 12 percent). The wood

<sup>\*</sup>Rules for rounding off numerical values (revised).

#### IS:4980-1968

shall be free from any kind of decay, insect attack, sapwood, centre heart (pith) knots, splits, warping or any other defect which is likely to impair its durability. The recommended species of timber are:

TRADE NAME

BOTANICAL NAME

axlewoodAnogeissus latifolia Wall.babulAcacia arabica Willd.benteakLagerstræmia lanceolata Wall.

bijasal Pterocarpus marsupium Roxb.

dhaman Grewia sp.

kindal Terminalia paniculata Roth.

laurel Terminalia tomentosa Wight et Arn.

rosewood (blackwood) Dalbergia latifolia Roxb. sissoo Dalbergia sissoo Roxb.

#### 3. SHAPE AND DIMENSIONS

3.1 Typical shape of the Indian club is given in Fig. 1. The nominal principal dimensions are given thereon.

#### 4. WORKMANSHIP AND FINISH

- **4.1** The clubs shall be turned from wood in such a way that the centre of gravity of the club lies in the lower portion.
- **4.2** The surface obtained shall be smooth and free from pits and other imperfections. The edges shall be rounded.
- 4.3 Before the clubs are varnished, these shall be treated by dipping either in a 10 percent (by weight) solution of copper naphthenate (see IS: 1078-1957\*) in white spirit for 10 seconds or in copper naphthenate dispersed in aqueous ammonia for 1 minute and allowed to dry thoroughly. Thereafter, the clubs shall be given two coats of varnish, shellac (see IS: 347-1952†). The second coat shall be applied after the first has dried thoroughly.

#### 5. MARKING

- 5.1 Each club shall carry the manufacturer's name, identification mark or registered trade-mark.
  - 5.1.1 The clubs may also be marked with the ISI Certification Mark.

NOTE—The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act, and the Rules and Regulations made thereunder. Presence of this mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply

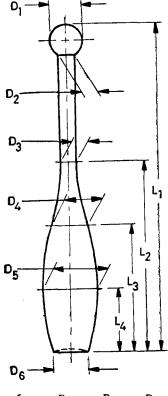
<sup>\*</sup>Specification for copper naphthenate.

<sup>†</sup>Specification for varnish, shellac, for general purposes.

with the requirements of that standard, under a well-defined system of inspection, testing and quality control during production. This system, which is devised and supervised by ISI and operated by the producer, has the further safeguard that the products as actually marketed are continuously checked by ISI for conformity to the standard. Details of conditions, under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

#### 6. PACKING

**6.1** Clubs shall be packed as agreed to between the purchaser and the supplier.



$L_1$	$L_2$	$L_3$	$L_4$	$D_1$	$D_2$	$D_{3}$	$D_4$	$D_5$	$D_6$
360	210	140	70	35	18	18	41	63	40
450	250	170	85	37	24	24	52	80	51
585	340	220	110	40	32	32	<b>65</b>	102	63

All dimensions in millimetres.

Fig. 1 Indian Club, Typical

#### INDIAN STANDARDS

#### ON

### Sports Goods

15:						Ks
414-1965	Guts for tennis, badmin	ton and squa	sh rackets	(revised)	•••	1.00
415-1963	Shuttlecocks (revised)	•••	•••	•••	•••	<b>2</b> ·00
416-1963	Cricket and hockey ball	ls (revised)		•••	•••	1.50
417-1965	Footballs, volleyballs, b	asketballs an	d water po	lo balls (revised)	•••	<b>2</b> ·00
827-1966	Sinew guts for tennis as	nd badminto	n rackets (	revised)		1.50
828-1966	Cricket bats (revised)		•••	•••	•••	1.50
829-1965	Hockey sticks (revised)		•••	•••	•••	1.50
830-1966	Tennis racket frames (	revised)	•••	•••	•••	2.00
831-1966	Badminton racket frame	es (revised)	•••	•••	•••	<b>2</b> ·00
2205-1962	Tube inflated football b	oladders	•••	•••		1.00
2216-1962	Tennis balls		•••	***	•••	1.50
2459-1963	Horizontal bars used in	gymnastics	•••	•••	•••	1.00
2460-1963	Pommelled horse, vaul		d vaulting	buck used in gymr	nastics	1.50
2461-1963	Balancing beams used i	n gymnastics	•••	•••	•••	1.00
2462-1963	Parallel bars used in gy	mnastics	•••	•••	•••	1.00
2463-1963	Rings used in gymnasti	ics		•••		1.00
2578-1963	Squash racket frames			•••		1.50
2719-1964	Carrom boards		•••	•••	•••	1.50
2746-1964	Spring boards		•••	•••		1.00
3345-1965	Sports nets		•••	•••	•••	1.00
3659-1966	Table tennis balls		••~	•••	•••	1.50
3785-1966	Wicket keeping gauntle	ets	•••	•••	•••	1.50
3800-1966	Batting gloves		•••	•••	•••	1.50
3874-1966	Boxing gloves		•••	•••	•••	<b>2</b> ·00
3923-1966	Leg-guards for cricket	batsmen, wic	ket-keepers	and hockey goalke	eepers	2.50
4141-1967	Table tennis rackets	•••	•••	•••	•••	2.5
4142-1967	Discus		•••	•••	•••	2.50
4143-1967	Carrom-draughts	•••	•••	•••		<b>2</b> ·50
4144-1967	Carrom-strikers	•••	•••	•••	•••	2.00
4385-1967	Throwing hammers		•••	•••	•••	<b>3</b> ·50
4386-1967	Putting shots			•••	•••	<b>2</b> ·50
4387-1967	Asymmetric bars			•••		4.00
4613-1968	Javelins		•••	•••	•••	<b>2</b> ·5
4614-1968	Hurdles	•••	•••	•••	•••	<b>2</b> ·5
4630-1968	Barbell set		•••	•••	•••	2.00
4973-1968	Badminton wollen ball			•••		<b>2</b> ·0
4979-1968	Table-tennis tables	•••				<b>2</b> ·50

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Gas Burning Appliances

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